

The Utility is committed to one capital infrastructure project in 2012—build a Utility Garage. The Utility shares garage space with the Public Works Department.

The Utility received a grant from the state in 2010 and has been assembling additional funding to build the utility garage. The Utility began developing a request for bids (RFB) in late 2011 and in January 2012 released the RFP. The goal is to hire a contractor by

March 2012 and to complete the garage by fall 2012. The estimated cost of the project is \$1 million.

The Utility has \$1.7 million remaining in a state grant for “water and sewer” improvements. Pending the results of the waste water treatment plant engineering analysis being conducted by USKH, Inc., the Utility may be able to initiate projects in 2012 at the sewer plant. The Utility will seek additional funding for sewer

plant projects from the US Department of Agriculture. (See related story, page 3, *Engineering Projects Look to Utility’s Future.*)

Pending the outcome of the state fiscal year 2013 budget, the Utility may be able to begin work on its sewer main lining project. (See related stories, page 1, *Utility in Governor’s Budget for \$2.5 Million* and page 2, *Voters Approve \$1.4 Million Loan to Repair Sewer Mains.*)

Meet the North Pole Utility Department Staff

The staff of the North Pole Utility are here to serve you. They are committed to providing you quality water and sewer service year round.

Paul Trissel, the Utility Supervisor has been with the utility for 14 years. Trissel served in the US Navy for six years in nuclear propulsion. He has an Associates Degree in Environmental Technology from University of Alaska Southeast, Sitka in water and waste water treatment. Trissel has Level 4 professional certifications in water distribution and waste water collection and he has Level 3 professional certifications in water and waste water treatment. He serves on the Governor’s Water and Wastewater Advisory Board.

The face and voice of the utility is Tricia Fogarty. She has been with the City for 9 years. Fogarty has lived most of her life in North and she is a North Pole High School graduate. Fogarty sets up new utility accounts, processes monthly billings and answers customers’ questions. Fogarty is also the City’s billing clerk and coordinates the building department.

James “Marty” Donovan has been with the utility for over five years. He



North Pole Utility staff from left to right: Chris Lindsoe, Tricia Fogarty, Marty Donovan, Seth Zrucky and Paul Trissel

is a life-long Alaskan born in North Pole and a North Pole High School graduate. He is a graduate of the Universal Technical Institute. Donovan has Level 2 professional certifications in water and waste water and Level 1 certifications in water distribution and waste water collection. Donovan is an ice hockey player and enjoys fishing.

Chris Lindsoe has been with the utility for over five years. He was born and raised in the North Pole area and he is a North Pole High School graduate. Lindsoe holds all four Level 1 professional certifications. He is a proud father of a two-year old daughter.

The utility’s newest staff member is Seth Zrucky. He started with the utility in August 2011. Zrucky grew up in Southern Minnesota. He served for 10 years in the US Air Force, most recently at Eielson AFB, as a SERE Specialist (Survival, Evasion, Resistance and Escape). In his six months with the utility, Zrucky has earned his Level 1 professional certifications in water treatment, wastewater treatment, water distribution, waste water collection and lagoon systems. Zrucky and his wife are expecting their first child in fall 2012.

Big Savings Hold Down Utility Rates

State grants, Federal Economic Stimulus awards and federal grants are keeping utility rates down by financing needed utility infrastructure projects and reducing operational costs. (See related story on page 3, *Utility on Track for \$18 million in Infrastructure Awards.*)

An example of a project that has yielded significant savings for Utility customers is the sewer lift station rehabilitation project Phases 1 and 2. Phase 1 was completed in 2010 and Phase 2 was completed in 2011. The projects were funded with a mixture of Federal Economic Stimulus, State grant and Utility funding.

To rehabilitate eight sewer lift stations cost the Utility about \$4,993,000. The average cost per lift stations was \$624,125 for engineering and construction costs.

State and Federal funding provided \$4,704,000 of the project financing while the Utility’s share was \$289,000. Utility rate payers had to pay less than 6 percent of the projects’ costs, or just \$36,000 per lift station

Another project that has yielded significant savings for utility rate payers is the Water Treatment Plant Pump Replacement Project. A



New pumps and piping installed with federal stimulus funding.

Federal Economic Stimulus award paid 100% of the project’s \$596,888 cost. The project replaced all the aging and failing pressure and circulation pumps at the water treatment plant.

The Stimulus awards was “green”, meaning its goal was to save energy. The Utility estimated energy savings would be 20%. Estimated energy savings in 2011 averaged over 50%. At current electric rates this equates to an estimated \$44,000 annual savings.

Utility in Governor’s Budget for \$2.5 Million

On December 15, 2011, Governor Sean Parnell released his state fiscal year 2013 budget. His budget included \$2,590,450 for the Utility Department’s Sewer Main and Manhole Rehabilitation Project.

If the funding remains in the budget, the Utility will combine it with a \$1.4 million

loan to repair sewer mains and manholes. (See related story, page 2, *Voters Approve \$1.4 Million Loan to Repair Sewer Mains.*) The Utility estimates that up to one third of the water going to the waste water treatment plant comes from ground water leaking into damaged sewer mains and manholes.

The bulk of the project will occur in the core of the oldest part of the City. Lining sewer mains versus replacing them will require limited digging and limited disruption of customers sewer service.

The state budget is typically signed into law July 1, so the project may not begin until 2013.

Highlights of 2011

- Grants and Economic Stimulus awards save utility customers millions of dollars
- Governor’s budget includes \$2.5 million for Utility
- Utility on path to generate \$18 million in external awards.

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Voters Approve \$1.4 Million Loan to Repair Sewer Mains

Approximately half of the water flowing to the sewer plant is ground water leaking into sewer mains and manholes, according to a 2005 engineering analysis. The ground water increases treatment costs and decreases the capacity of the treatment plant.

A solution to the problem is to line aging sewer mains. Lining sewer mains requires less excavation, less

customer inconvenience and is less expensive than replacing the mains. The estimated cost to line all the aging sewer mains is \$3.9 million.

The City applied for and was offered a state loan of \$1.4 million at 1.5% annual interest rate to help finance the project. Authorization from the citizens of North Pole was needed for the City to accept debt.

The ballot initiative on the October 4, 2011 municipal election to accept the \$1.4 million loan passed with 238 votes in favor and 64 votes opposed. The ballot initiative passed by almost 79%.

See related story, page 1, *Utility in Governor's Budget for \$2.5 Million.*

Sludge Removal Project Improves Sewer Treatment

North Pole received a grant from the state for \$407,665 to help finance desludging the sewer treatment lagoons. The Utility's share of the project was \$174,714. Sludge had previously been removed once from only one lagoon since the plant was built.

As sludge accumulates on the bottom of the lagoons, it decreases their volume making less space available for treatment.

In June and July 2011, the project removed almost 155 dry tons of sludge. With an EPA permit, the sludge is being stored on site. By freezing and thawing over two winters the volume of the sludge will decrease because water will escape from the sludge.

In two years the Utility will test the sludge and learn if it can be used as fertilizer or if it must go to a landfill.



Sludge removal dredge at waste water treatment plant lagoon in June 2011.

2011 Utility Budget Summary

The Utility is an enterprise fund. An enterprise fund operates on fees versus tax revenues and its finances are separated from the general fund.

The Utility has been progressively building financial stability. The financial condition of the Utility took a step forward in 2009 when the City Council recognized the need for and approved charging separate rates for operational expenses and rates to fund capital projects. A capital reserve is critical because capital project costs range from the hundreds of thousands to millions of dollars. Also most grants have a matching contribution;

for example state grants often require a 30% match.

At the end of 2011, the Utility's operating budget was \$1,310,273. The budget was slightly negative by \$12,899 due to a sewer spill that cost over \$50,000 and higher than expected energy costs. The capital project reserve for the Utility at the end of 2011 was \$1.24 million.

Beginning in 2010 and continuing in 2011, the Utility created restricted funds to finance medium term assets, particularly vehicles. As an example; the Utility was able to purchase a jet

vac truck with a combination of a \$300,000 federal stimulus award and \$30,000 of Utility cash. The Utility is restricting \$30,000 per year with the goal that it will have a minimum reserve of \$300,000 to replace the jet vac truck in 2020.

The Utility's goal is to have a restricted cash reserve of approximately 50% of its annual operating budget. For the end of 2011 this translates into a restricted cash reserve of \$650,000. This would leave the Utility with an approximate cash balance of \$600,000 to finance needed capital projects in 2012.

Engineering Projects Look to Utility's Future

Much of the Utility's capital infrastructure is aging and in need of rehabilitation. The Utility started two projects in 2011 to determine priority projects and to develop engineering plans.

The Utility received a \$750,000 grant from the US Department of Agriculture combined with a \$250,000 grant from the state to help fund these efforts.

USKH, Inc. is analyzing the Utility's waste water treatment plant. The treatment works has not been rehabilitated since it was built in the mid-1980s. Pumps and piping are failing and the treatment process is inefficient and outdated.

PDC Engineers, Inc. is analyzing the Utility's water treatment plant and associated distribution system. The water treatment plant was also built

in the mid 1980s; however, over the past several years the Utility has upgraded some of the equipment in the plant thanks to a Federal Economic Stimulus award. (See related story page 1, *Big Savings Hold Down Utility Rates.*)

The engineering projects are the first step in acquiring funding to rehabilitate these vital utility infrastructure assets.

Utility on Track for \$18 million in Infrastructure Awards

Running a utility is expensive, especially in Interior Alaska. North Pole's Utility has been very fortunate over the past four years. With a pending \$2.5 million award in the governor's fiscal year 2013 budget, the Utility is on the path to have approximately \$18 million of external financing invested in its utility infrastructure. (See related story, page 1, *Utility in Governor's Budget for \$2.5 Million.*)

The external investments in North Pole's utility infrastructure help fund projects utility customers would otherwise have to pay for. \$18 million equals almost \$270,000 of external investment for each of the Utility's approximate 650 customers.

The bulk of the external awards have come from the state, but there have also been millions of dollars in federal

awards. North Pole received over \$2.9 million in Federal Economic Stimulus awards, or approximately \$4,500 per utility customer.

These combined awards help finance critical utility infrastructure projects that utility customers would otherwise have to pay for through their utility bills.

External Investments in North Pole Utility: 2008 to 2011

Funding Source	Purpose	Amount	Funding status
EPA Grant (federal)	Lift station renovation	\$970,000	Awarded
USDA Grant (federal)	Water and sewer system engineering	\$750,000	Awarded
State Grant	Lift station renovation	\$2,204,851	Awarded
State Grant	Water and sewer improvements	\$1,716,519	Awarded
Federal Stimulus	Lift station renovation	\$1,922,222	Awarded
Federal Stimulus	Jet-vac truck	\$300,000	Awarded
State Loan	Sewer main and manhole repair	\$1,416,500	Awarded
State Grant	Water plant roof repair	\$160,000	Awarded
State Grant	Well rehabilitation and controls	\$147,000	Awarded
Federal Stimulus	Water meters	\$100,000	Awarded
Federal Stimulus	Water pump replacement	\$600,000	Awarded
Privately funded	Water main installation (sulfolane response)	\$1,709,000	Completed
Privately funded	New drinking water wells (sulfolane response)	\$2,300,000	Completed
State Grant	Sludge removal	\$524,977	Awarded
State Grant	Utility Garage	\$595,000	Awarded
State Grant	Water treatment engineering design	\$125,000	Awarded
State Grant	Waste water treatment engineering design	\$125,000	Awarded
State Grant	Sewer main and manhole repair	\$2,590,450	Pending